HOW TO USE RAW ROCK PHOSPHATE

May Be Used Profitably as Reenforcement to Stable Manure or Plowing Under.

PROFITABLE AS PLANT FOOD

When Immediate Results Are Desired Acid Phosphate Is Preferable-Raw Rock In Used as Absorbent in Dairy Barns,

(Prepared by the United States Depart ment of Agriculture.) As a cheap and satisfactory source of phosphoric acid, raw rock phosphate merits extensive use on farms in localities where the material is available. Nowadays when all commercial fertilizers are abnormally expensive to the time to make liberal use of raw rock as a re-inforcement of stable manure, as a material to be distributed and plowed under with green cover crops and as a profitable plant food for direct application to soils that are rich in organic matter.

The relative unpopularity of raw rock phosphate in the past has resulted from incomplete and unsatisfactory experimental work. Recently the farm use of raw rock has expanded to 91,-000 tons annually, worth approximate-

Of course when immediate results are desired, the more costly acid phosphate is preferable as its plant food is readily soluble and suitable for rush order use. Raw rock phosphate, although it contains twice as much phosphoric acid as the average acid phosphate, slowly releases its stores of food for crop use. It costs about \$6.50



Raw Rock Phosphate Can Be Used Profitably to Re-enforce Stable Ma-

a ton in carload lots now at the mines. For practical results, it is essential that the raw rock be finely ground to the extent that 90 per cent of the material will pass through a sieve having 100 meshes to the linear inch.

How to Spread.

Where the raw rock phosphate is used as a re-enforcement for stable manure, it may be sprend at the rate of 50 to 60 pounds over each ton of manure as it is hauled from the barn or stable yard to the fields. A much better practice, however, is to compost the rock with the manure for a period of a month or more before spreading on the fields. On account of its admirable absorptive qualities the raw rock is used as an absorbent in dairy stables. The common practice is, to spread about a pint of the material upon the digestive system, and at the doily behind each cow in the stable.

Where a green cover crop, such as cowpeas or soy beans, is to be turned under, it is a valuable practice to spread about 1,000 pounds of raw-rock phosphate an acre over the green stuff before the plowing is begun. Products are developed during the decomposition of the organic matter which are efficient in liberating the plant food that is slowly available in the raw rock. Where the raw-rock phosphate ts applied in half-ton doses an acre to a soil that is very rich in organic matter the same beneficial results are slowly notable as obtained where the fertilizer is turned under with the green crop.

Best Form of Acid.

The presence of decaying organic matter in the soil increases the effectiveness of raw, ground rock phos phates due probably both to greater bacterial activity and the higher content of carbon dioxide in such soils From a similar standpoint, the effectiveness of raw rock phosphate is usually increased after remaining in the soil for a year or more. Most crops respond more quickly to applications of acid phosphate than to bone, basic slag or raw-rock phosphate. Accordingly, where the early stimulation and quick maturity of the crop are the main considerations, acid phosphate is probably the best form of phosphoric acid to apply.

The question of whether increase In yield ordinarily can be produced more economically by applications of soluble or relatively insoluble phosphates, must be considered in a meas ure an individual problem for each farmer, since it depends on a number of factors of which the most important are the nature of the soil, the crop system employed, the price of the various phosphates in each particular locality and the length of the growing

The Bost Breed.

No one question comes to the exension poultryman more often than Which is the best breed?" and the only justifiable answer, and the one we have made hundreds of times, is,

UNUSUAL RECORD SET BY INDIANA MEMBERS

Boys Raised 1,009 Bushels of Corn on Eleven Acres,

Average Yield of 91.3 Had Never Been Equaled by a Club in the State-No Worry This Season Over Seed Situation.

(Prepared by the United States Department of Agriculture.)
Eleven Monroe county (Ind.) boys, members of a boys and girls' club organized by the United States department of agriculture and the State Agricultural college at Purdue, raised, in 1918, 1,003.9 bushels of corn on 11 measured acres. The average yield,



A Corn Club Boy With a Bushel of Selected Seed.

91.3, had never been equaled by a club in the state, although there have been larger individual yields.

The highest yield, 105.9 bushels, was secured by Howard Jammison, eighteen. The second best showing was made by Winfred Buckley, fifteen,

who raised 98.6 bushels on his acre. Great difficulty was experienced last year in obtaining good seed corn in that locality, as elsewhere, but by the aid of a former county agent and the local bank each boy who was a member of the corn club secured one dozen ears of high quality seedenough to plant one acre. This spring there will be no worrying on the boys part over the seed-corn situation-for before frost last fall they had selected from their own plots enough ears of the best seed type to plant over 100 acres this season.

QUALITIES OF SILAGE

Makes Healthier Cows Because of Its Favorable Effect Upon Digestive System.

One peculiar inquiry is repeated year after year. Does sliage cause tuberculosis? Of course not. A man eating sauerkraut is in just as much danger of contracting tuberculosis as a cow is from eating silage. Teeth falling out, stomachs ruined, tuberculosis, and nuny other vaporings have been laid to silage, but like hollow tail, they are only the progeny of ignorance. Silage makes healthler cows because of its favorable effect same time it permits those cows produce milk at a lower cost.

TO STORE PERISHABLE FOODS

Every Farm Home Should Have Cellar, Storehouse and Refrigerator to Care for Surplus.

Farmers lose much every year because their facilities for storing perishable foods are poor. Eyery farm home should have a cellar, storehouse and refrigerator so the surplus foods may be saved till such a time as they may be consumed. The fact that producers have inadequate facilities for saving perishable products gives specu lators advantages.

PROFIT AND LOSS ON FARMS

Those Who Raise Truck Crops and Supply Table With Vegetables Save Much Money.

A dollar saved is a dollar made. Those who plant gardens, raise truck crops and supply their tables with tender vegetables in summer and canned vegetables in winter will save cash that would be required from the returns of field crops. The cash thus saved may be the difference between profit and loss in farming.

DAIRY NO PLACE FOR DOGS

Cow Must Not Be Hurried About Farm If Best Results Are to Be Obtained in Milk Pail.

Dogs have no place on a well-kept dairy farm. The cow, to give good re sults, must not be hurried about or driven on the run to and from the barn or pasture.

Advantage of Records. One advantage of farm bookkeep ing: The farmer knows and doesn't guess he's paid a bill when the ques-

Keep on Cuiling Slackers. Keep cuiling the slacker hen and the slacker cow off of the farm.

HENHOUSE PRODUCT RETURNING TO NORMAL PRICES AFFORDS WELCOME CHANGE IN DIET



Either Creamed Eggs and Cheese or Dutch Eggs Make a Good Supper Dish.

prices again, they afford a welcome and healthful change in the diet. In any of the following recipes suggested by the United States department of agriculture, they may be used in place of meat in the meal. Eggs are much more easily digested if time is taken to cook them very slowly.

Steamed Eggs. Butter slightly the bottom of a custard cup and slip an egg into it. Place the cup in a pan of gently boiling water (water should come half-way up side of cup); cover and steam until white of egg is done. Steamed eggs may be served on crisp toast if desired.

Poached Eggs and Tomato Sauce. Allowing one-half tenspoonful of salt to one quart of water, have a shallow pan two-thirds full of boiling water. Break each egg separately into a saucer and slip them into the water. Cook as for poached eggs and serve with the following sauce:

2 cupfuls canned 2 tablespoonfuls of tomatoes and slice onion, or cupful tomato butter. 2 tablespoonfuls of flour, 1/2 tablespoonful of 4 teaspoonful salt, pepper.

Cook tomato and onlon, finely chopped, 20 minutes, then rub through a strainer. Melt the butter, add dry ingredients and strained tomatoes. Pour this sauce over the eggs and

Egg in Nest, Carefully separate the white from he yolk of an egg. Beat the white until stiff and pile lightly on a nicely trimmed slice of toast. With a spoon make a depression in the top of the white and slip the egg yolk into it. Place on a baking dish in a moderate

oven and when the white has become a golden brown remove and serve. It may be seasoned to taste. Eggs Goldenrod.

cupful milk. tablespoonfuls of butter, 1% tablespoonfuls butter.
4 hard cooked eggs.
4 teaspoonful of 1 teaspoonful chopwhite pepper.
4 teaspoonful salt. 6 slices toast.

Melt the butter, add the dry ingredients and stir until smooth. Add the heated milk slowly, stirring constantly, and allow to come to the boiling point. Separate the yolks from the whites of the hard-cooked eggs. Chop the whites finely and add them to the white sauce. Cut the slices of toast in half and after arranging on the platter, pour the sauce over them. Put the yolks through a potato ricer or press them through a strainer, sprinkling them over the sauce. Garnish

with parsley and serve. Dutch Eggs.

6 hard cooked eggs. 1 cupful of white cheese or cottage cheese.

sauce.

1 sweet red pepper cut into strips.

Cut the eggs into quarters and place about one-quarter of the amount in a buttered baking dish. Cover this layer with sauce, and sprinkle over it a full. Sprinkle bread crumbs on top, strainer; sprinkle over the toast.

(Prepared by the United States Depart-ment of Agricultura.)
With eggs returning to normal oven. Escalloped Eggs.

> 2 tablespoonfuls of 2 tablespoonfuls of butter. flour.
> 2 cupfuls of bread 3 tablespoonfuls of grated cheese. % teaspoonful pepcrumbs. 6 hard cooked eggs. cupfuls cocked macaroni or rice. 1 cupful milk. ½ teaspoonful malt. per. 1 cupful of tomato

Make a sauce of the flour, butter, salt and pepper, and remove from the fire to add grated cheese. Stir until melted. Combine carefully the cooked macaroni or rice, sliced egg and salt. After covering bottom of baking dish with buttered crumbs add the mixture. Then add rest of crumbs, brown in hot oven and serve with tomato sauce. French Omelette.

4 tablespoonfuls of % tablespoonful of hot water. sait. 2 tablespoonfuls of 1-16 tenspoonful of pepper eggs.

Bent the eggs slightly, just enough to mix yolks and whites; then add the hot water and seasoning. Put the butter in a small hot frying pan and when melted turn mixture into the pan. While this is cooking, mix slightly with a fork until the whole is of a creamy consistency. Place on a hotter part of the fire and allow to brown quickly underneath. Bring all together at one side of the pan and carefully slip it out on a hot platter. Garnish and serve while hot.

Spanish Omelette.

Mix and cook a French omelette. Serve with tomato sauce in the center and around the omelette.

Tomato Sauce.

2 tablespoonfuls of 14 tablespoonful cabutter.

135 tablespoonfuls of pers.
136 tablespoonfuls of mushrooms.
1 cupful tomatoes.

Cayenne.

1 tablespoonfuls of flour. 36 teaspoonful salt.

Brown onlon (finely chopped) in butter and flour. Cook the tomatoes with the onion for 15 minutes. Add the capers, mushrooms and seasoning, If desired, substitute three tablespoonfuls peas and two tablespoonfuls chopped red peppers for the capers and mushrooms.

Egg Souffle.

2 tablespoonfuls of beggs.
butter. % cupful cream.
1½ tablespoonfuls 1 teaspoonful salt.
Cayenne. 1½ cupfuls milk.

Cream the butter, add the flour, and gradually the scalded milk and cream Cook in double boller five minutes and add the yeiks of eggs which have been beaten until lemon-colored. Add seasoning and fold in stiffly beaten whites, Turn into a buttered dish, set in a pan of hot water and bake until firm.

Creamed Cheese and Eggs. 3 hard-boiled eggs.
1 tablespoonful of flour.
2 cupful milk,
3 peck of cayenne.
3 cupful or 1 ounce grated cheese.
4 slices of toast.

5 teaspoonful salt. Make a thin white sauce with the flour and milk and seasonings. Add the cheese and stir until melted. Chop the whites and add them to the sauce. layer of cheese; then a few pieces of Pour the sauce over the toast. Force the pepper. Repeat until the dish is the yelks through a potato ricer or

GET FULL VALUE IN CLOTHES

Many Discarded Garments May Be Made Wearable by Sponging, Cleaning and Pressing.

(Prepared by the United States Depart-ment of Agriculture.)

Sponging, cleaning and pressing will make wearable many a garment now discarded as too shabby, suggest the extension workers of the department of agriculture. It is not a bad idea to estimate just how much money value there is in an extra month's wear of a suit, cont or dress.

The following points, if followed, will help to extend the length of wear of dresses and other garments:

Sponging with hot vinegar will make the "shiny part" of any garment less noticeable.

Steaming a velvet but which bus tost its freshness over the tea kettle will greatly improve its appearance. Fresh cellars and culls of white or contrasting color will give suit or dress

a new appearance. When not in use hang outside garments, well brushed, in suitable hang-

ers away from dust. Cotton covers put over the garments on hangers will preserve the freshness of waists, dresses and coats worn only occasionally.

Wear practicable wash aprons while at work. Secure buttons, fastenings, etc., on ready-made garments before wearing.

MALLAROUND

Red pepper should be used with great moderation.

Watch the custards-if they are cooked too long they will be watery.

Add salt to starch water and it will prevent the starch from freezing out. Pictures should be hung at the

height of the eye of the average per-When the heels of the overshoes wear cut cut them in the shape of a

sandal. . It is best to roast or pan chicken with the breast down. It will be more juicy.

Add a tablespoonful of vinegar to the water when cooking corn on the cob. This whitens the corn and makes it tender.

To have fish firm it should be cooked in salted water. A little vinegar dituted with this will impart a delicious finver to the fish.

BETTER THAN ANY MEDIUMS

Mince Pie That Brought Vision of Home Caused Wounded Soldier to Long for Life.

Ple is not among the articles treated of in works on materia medica, but a recent incident shows that it may have therapeutic value. In a hospital lay an American sailor, for whom everything had been done by surgeons, doctors and nurses, and yet something was lacking. He was bomesick; his mind was ever away in a little Atlantic const town. One day, in the midst of his bodily pain and soul-suffering, there flashed upon him the object of his quest, and he murmured excitedly: "Oh, if I could only have a plece of mince ple." It was not that he wanted to eat a piece of pie, for he was too ill for that. His hunger was for what the ple represented. An American nurse who heard the wish managed, with some difficulty, to find all the ingredients for a real New England ple. When she took it to him she put with it a bit of cheese, also hard to procure in these times, so that nothing would be lacking, and in the cheese she planted a miniature Stars and Stripes. The poor boy could ent neither the ple nor the cheese, but they contributed just the home touch needed to improve his condition. When the wife of the American consul general visited him later she remarked upon the improvement in his condition, and he said: Two days ago I was in such misery that I could have welcomed death. Now I feel that America Is not so far away as I thought and that I have got to hang on."

GENERAL BELIEF IN HONESTY

Something Very Like the Milennium Seems to Be Near in Great British Metropolis.

How is the sudden trust Londoners bave come to exhibit for each other to be accounted for? There is an extreme shortage of copper coins for small change in London, and one man says of his experiences: "On several occasions lately news vendors who have been unable to change silver have said to me. 'Never mind, pay me the next time you are this way." Only one of them knew me as a regular customer. Even more unexpected credit than this was offered me at a railway booking office where I tendered a shilling for a two-penny fare. 'I'm short of coppers,' said the girl booking clerk, 'pay me tomorrow.' 'But I shall not be here tomorrow,' I replied. "Then pay me the next time you are here, whenever it is,' she said. 'But supposing I forget.' I expostulated. "Oh. I know that you will come and pay me some day, she answered. 'Tve never known people fail." Similar testimony is offered by others, who tell of copper credit thrust upon them by strangers. and often very poor and humble strangers.-London Mail.

Clearing Up After War.

On the banks of the Thomes, loss than twenty miles from London, there Is an American town of the mush room kind such as you might find in a new California oil field. Its population consists of more than 200 white men and about 150 negroes. It covers twenty-five acres which nine months ago were fallow grass land, The business of the town is to receive, sort and store war material. sheds a quarter of long, office buildings, water supply and electric lights, the whole surrounded by a hedge, a few armed sentries and much mud. All day long the khaki-clad negroes push and haul rallway trucks full of war material.

War material coming back from Russia is being stored at this camp. also the fittings of the dismantled hospitals which the American army established in England.

Warmth Increases Oil Flow.

An electrical method of carrying warmth to the bottom of oil wells has been found in many cases greatly to increase the flow of oil. The heating process, says Popular Mechanics Magazine, decreases the viscidity of the oil, usually occasioned by the admission of air to the well and the cooling of the rock bed. Minute crevices and capillary channels which afford easy passage to warm, thin oil become quite impassable if the oil gums. The electric heating method not only thins the off but often generates gas whose pressure helps the oil to the surface. The system found milltary use in the abandened oil fields of Roumania and Gallela.

What's in a Name?

Most readers are familiar with the story of the German bank in a United States city which, finding its name unpopular, changed it to the "Sherman bank." Here is another example on the same lines: A popular New York city German restaurant was called the Kloster Glocke (Cloister Bell), and its front was decorated with a large bell as a sign. The name has been changed to the "Liberty Bell," and the bell of the old monastery now does duty as a replica of the one which rang out independence to the colonies.

Doubts Mechanical Skill.

A "prominent business man" has offered \$50,000 for the privilege of being carried as mechanic on the first transatlantic flight made in an airplane. If this offer is accepted, it is to be hoped that his mechanical ability equals his enthusia un. - Spring deld Republican.

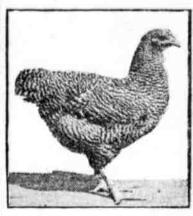


GOOD CARE FOR SETTING HEN

Attention Given Fowl Plays Important Part on Number and Condition of Chicks,

(Prepared by the United States Depart-ment of Agriculture.)
The kind of care and attention glyen a setting hen during the process of hatching eggs plays an important part on the number and condition of the chicks when hatched. See that the hens are made comfortable on the nest, allow them to come off only once a day to receive feed and water.

If there are any that do not desire to come off themselves, they should be taken off. Hens usually return to



A Good Type to Select for Laying.

their nests before there is any danger of the eggs chilling, but if they do not go back in buil an hour in ordinary weather, they should be put on the nest. Where a large number of sitters are kept in one room it is advisable to let them off in groups of from four to six at a time. The eggs and nests should be examined and cleaned, removing all broken eggs and washing those that are solled; in the latter case the soiled nesting material should be removed and clean straw added. Nests containing broken eggs that the hen is allowed to sit on soon. secome infested with mites and lice, which cause the hens to become unensy and leave the nest, often causing the loss of valuable sittings of eggs. In mite-infested nests, the hen, if fastened in, will often be found standing over rather than sitting on the eggs. Many eggs that are laid in the late winter and early spring are infertile. For this reason it is advisable to set several hens at the same time. After the eggs have been under the hens from five to seven days, the time depending somewhat on the color and thickness of the shelis-white-shelled eggs being easier to test than those briving brown shells-they should be tested, the infertile eggs and dead germs removed, and the fertile eggs put back under the hen. In this way it is often possible to but all the eggs that several hens originally started to sit There is a street of wooden huts, an on under fewer hens and reset the other of corrugated iron buts, buge others. For example, 30 eggs are set under three hens at the same under each. At the end of seven days we find on testing the eggs from all the hens that ten are infertile, which leaves us 20 eggs to reset, which we do by putting them under two heas, and have the remaining hen sit over again after she has set only seven days. In this way considerable time can be saved in one's hatching operations.



The pullets and the year-old hens are the best egg producers.

Market all cockerels not wanted as breeders at as early a date as pos-

under six months of age. It becomes a "fowl" after that period. One pound of feathers can be se-

A "chicken" is a young fowl, usually

from ten ducks, or from four geese. Whole corn is the proper food for sitting hens. They should have green

cured from five ordinary fowls, or

food, grit, and pure drinking water. Eggs for hatching should be carefully selected, well-formed, with and shells, and kept in a temperature of

50 degrees to 60 degrees F. The chick worth having is the chick that releases itself from the shell with vigor, life and vitality; that comes jumping, as it were, into life.

A time-saving plan is to set hens in pairs, and giving the clicks hatched from both to one hen, allowing the other hen to go back to inying.

In salting the mush dissolve sufficient salt in the water with which the mash is to be moistened. In this way the sait will be more evenly distributed. An ounce of sait is about right for 100 fowls.